NOTICE TO EQUIPMENT BIDDERS FOR MIAMI COUNTY HIGHWAY DEPARTMENT FOR A NEW 3 YARD, 4-WHEEL DRIVE LOADER

Notice is hereby given, that the Board of County Commissioners of Miami County, Indiana, will receive
BIDS for a **New 3 Yard, 4-Wheel Drive Loader** will be accepted up to the hour of **9:30 a.m. on July 6th 2015**, requisitioned by the Miami County Highway Department for equipment use maintenance of county roads and bridges. Bids should be submitted on **Form #96**, prescribed by the State Board of Accounts. **Bids will be awarded on July 13th 2015.**

Trade-in allowance on a 1985 Case W14 Loader towards new equipment. New loader to be delivered on or by 60 days of ordered from winning bid.

Bid specifications for 3 Yard, 4-Wheel Drive Loader

Compliance		
		Engine
yes___	no___	Six Cylinder, turbocharged, charge air cooled diesel engine and shall be designed and built by the manufacturer
yes___	no___	Engine shall be certified to EPA Final Tier 4/EU Stage IIIB
yes___	no___	Engine shall have a wet-sleeve cylinder liner design for improved cylinder cooling over dry sleeve and cast-in-bore design for improved cylinder and piston ring durability.
yes___	no___	Engine displacement shall be no less than 6.8 liters (414 cu. In.)
yes___	no___	Engine net peak power shall be no less than 163 hp (121 kW) @1800 rpm
yes___	no___	Engine shall develop at least a 37% torque rise and should have at least 504 lb. ft. @ 1,100 rpm net peak torque
yes___	no___	Fuel system shall be high-pressure, common rail
yes___	no___	Daily check points shall be accessible from one side of the engine and shall be done from ground level
yes___	no___	Under-hood engine air cleaner shall be dry type, dual element with a restriction sensor and in-cab restriction warning light
yes___	no___	Access to engine will be open from both sides with side opening, full access service doors
yes___	no___	Engine shall have no less than 30-micron rated primary fuel filter with water separator
yes___	no___	Loader shall be equipped with a heavy-duty steel fuel tank guard
yes___	no___	Service interval for the engine oil and filter shall be 500 hours
yes___	no___	The unit shall have an auto-idle, auto-shutdown feature for the engine as standard equipment
yes___	no___	The electrical system shall be 24 volt with 100 amp alternator
		Cooling
yes___	no___	Unit shall have a proportionally controlled, hydraulically driven, 90 degree-swing-out fan, standard equipment
yes___	no___	The unit will have two-side access to all coolers
yes___	no___	Air intake shall be pre-screened (3 mm perforations) for each cooling component
yes___	no___	Cooling system shall be isolated from the engine compartment
yes___	no___	Unit shall have a coolant recovery tank provided
yes___	no___	Unit shall have a fan-guard

yes___ no___ Fluid levels should be easily checked by sight gauges or overflow tank

Power Train

yes___ no___ Unit shall have a torque-converter, power shift transmission - 5 forward, 3 reverse gears

yes___ no___ The transmission shall be electronically controlled, adaptive, with load and speed dependent shift modulation

yes___ no___ Shift modes shall be manual, auto to 1st or 2nd, kick down or kick up/down.

yes___ no___ Service interval for the transmission oil filter shall be 2000 hours

yes___ no___ The transmission clutch calibration shall be performed from the cab monitor and shall have three clutch cutoff settings adjustable on the switch pad

yes___ no___ Unit shall have steering column or joystick mounted F-N-R and gear-select lever, kick-down button on hydraulic lever. Will also have quick shift feature that allows pushbutton gear changes, one gear at a time

yes___ no___ Sight gauge showing transmission fluid shall be at ground-level

yes___ no___ Transmission filter restriction shall be displayed in the cab

Axles/Brakes

yes___ no___ The final drives shall be heavy-duty inboard planetary

yes___ no___ The loader shall have two brake pedals with an activation switch to allow left brake pedal to switch between a brake neutralizer or brake only function.

yes___ no___ The service brake shall be hydraulically actuated, inboard, sun shaft mounted, pressure oil cooled, self-adjusting, single disc and sealed from water, mud and dust contamination

yes___ no___ The parking brake shall be automatic, spring applied, hydraulically released, oil cooled, multi-disc and sealed from water, mud and dust contamination

yes___ no___ Rear axle shall not have less than 24 degree total oscillation, stop to stop, when equipped with 20.5R25 tires

yes___ no___ The dipstick port and housing fill shall be at the top of the axle

yes___ no___ The front axle shall be hydraulically actuated, disc clutch style, locking differential for maximum traction when required but with less tire wear than limited slip or no-spin differentials

yes___ no___ An optional rear axle disconnect shall be available for reduced fuel consumption and improved ride while driving the loader on-road between sites

yes___ no___ The loader shall have a standard hydraulic locking front with conventional rear and optional dual locking front and rear

yes___ no___ The loader shall have front axle with hydraulic locking differential

yes___ no___ The loader shall have front and rear axles with hydraulic locking differentials

Hydraulic System

yes___ no___ Hydraulic filter shall be in the hydraulic tank with service interval of 4000 hours

yes___ no___ The hydraulic fluid shall have a rated life of 4000 hours

yes___ no___ The hydraulic system shall be pressure-compensating load-sensing for reduced fuel consumption and better fluid heating compared to open center hydraulic systems

yes___ no___ Hydraulic reservoir capacity should be no less than 32.5 gallons for extended hydraulic fluid intervals and cooler system temperature

yes___ no___ Unit will be provided with an automatic return to dig to level attachment

yes___ no___ In cab adjustable automatic boom height kick out control

yes___ no___ Unit will be provided with in-cab adjustable automatic boom return-to-carry control

yes___ no___ Unit shall be equipped with either single-lever joystick or two-lever fingertip pilot-operated controls

yes___ no___ A sight gauge will be provided for checking hydraulic reservoir fluid

yes___ no___ Hydraulic pump shall be variable-displacement, axial-piston pump: closed-center, pressure-compensating system

yes___ no___ Loader steering articulation angle shall be no less than 80 degrees, 40 degrees in each direction

Electrical

yes___ no___ Two batteries shall be included, 24 volt, 950 CCA, with a rated reserve of no less than 25 amps for 190-min at 80F.

yes___ no___ The unit shall have a solid-state electrical power distribution system using circuit board technology and solid-state switches

yes___ no___ The unit shall have a keyless starting system with multiple security modes

yes___ no___ The unit shall be provided with a master electrical disconnect switch

yes___ no___ Cab will be pre-wired for a rotating beacon/strobe light

yes___ no___ The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris

yes___ no___ Unit shall be equipped with driving lights with guards, turn signals and flashers, stop and tail lights. The tail lights shall be LED type mounted high up in the rear grille for protection from damage and better sight visibility and shall have a normal service life equal to the machine.

yes___ no___ Unit shall be equipped with analog display for: engine coolant temperature, transmission oil temperature, hydraulic oil temperature, and engine oil pressure

yes___ no___ Unit shall have digital readout for: engine rpm, odometer, transmission gear/direction indicator, speedometer, hour meter, fuel level and outside temperature

yes___ no___ Unit shall have operator warning lights for: check engine, engine oil pressure, engine air restriction, battery voltage, transmission filter restriction, brake pressure, hydraulic oil filter, transmission fault, hydraulic oil temperature

Operator Station

yes___ no___ Unit shall be equipped with canopy with ROPS/FOPS protection, and be multiplane isolation mounted for noise/vibration reduction

yes___ no___ 3" retractable seat belt shall be provided

yes___ no___ Steering wheel shall be tilt-able

yes___ no___ 3-point contact at all times at the front and rear of the loader and around the roof-line

yes___ no___ The cab shall have continuous and unobstructed glass from roofline to floor for visibility in tight quarters.

yes___ no___ A seat backrest extension will be standard

yes___ no___ Cab shall have 2 cup holders, personal cooler holder/storage, compartment for operator's manual, rubber floor mat

General Specifications

yes___ no___ Unit shall be equipped with 20.5 R 25, 1 Star L-3 tires with multi-piece rims

yes___ no___ Front tires shall be covered with fenders

yes___ no___ The counterweight shall be built-in

yes___ no___ Unit will be provided with a hitch with locking pin

yes___ no___ Unit shall have an articulation locking bar

yes___ no___ Unit shall have vandal protection with lockable engine enclosures, right counterweight storage, battery box, filler access for radiator/fuel/hydraulic/transmission

yes___ no___ The unit shall be provided with a loader boom service locking bar

yes___ no___ Loader shall have reinforced articulation joints with double tapered roller bearings

yes___ no___ Fuel tank capacity shall be no less than 86 gallons (325 L)

yes___ no___ Operating weight with standard equipment, pin-on wide GP 3 cy yd. (2.3 m^3) bucket, 20.5R25 tires, ROPS cab, 175 lb. operator and full fuel tank shall be no less than 28,621 lb. (12 982 kg)

yes___ no___ Bucket breakout force shall be no less than 23,951 lbs. (10 864 kg) with manufacturer's standard z-bar with pin-on wide 3 cu yd. pin on bucket and standard configuration

yes___ no___ Ground clearance under the loader shall be no less than 15.7" (0.40 m)

yes___ no___ Loader with attachment coupler and bucket shall have height to hinge pin no less than 12’6” (3.81 m)

yes___ no___ Machine Full turn tipping load with standard Z-bar linkage and wide general purpose 3 cu yd. (2.3 m^3) shall be at least 20,898 lb. (9 479 kg).

yes___ no___ Dump clearance at 45 degrees at full height shall be no less than 9 ft. 3 in (2.82 m) with wide General-Purpose with Bolt-on Edge bucket

yes___ no___ Reach at 45 degree dump, 7 ft. clearance shall be no less than 4 ft. 9 in (1.44 m) with wide General-Purpose with Bolt-on Edge bucket

yes___ no___ **Frames and Structures**

yes___ no___ Machine front frame shall be of a 4-plate design of four vertical plates extending from boom pivot pins reaching to the front axle to distribute boom loads on the axle. The design is superior to the two-plate frames

yes___ no___ Loader bucket bell crank linkage shall be fabricated of high strength steel for increased durability and strength over castings.

yes___ no___ Machine shall be equipped with an exterior mounted, ground level storage compartment

Optional configuration

yes___ no___ Unit has optional axle coolers

yes___ no___ 5 year Subscription 2-way telematics system

yes___ no___ Transmission guards

yes___ no___ Bottom guards

yes___ no___ JRB Coupler

yes___ no___ JRB 3 yd. General Purpose bucket with bolt on cutting edge

yes___ no___ JRB 60" Forks

yes___ no___ LED lights

yes___ no___ Ride Control